

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claim 1 (Currently Amended): A communication device comprising:

a central controller configured to establish a communication session between a first object and a second object, said first object employing a first communication protocol used in establishing a communication session with said central controller, said first object having a first adapter configured to translate between another communication protocol that is native to said first object and said first communication protocol, said second object having a second adapter, said second object employing a second communication protocol that is not compatible with said another communication protocol, wherein:

said central controller includes a protocol coordination mechanism that compares attributes of different protocols supported by said first adapter and said second adapter when establishing said communication session between said first object and said second object;

said central controller includes a database having a list of subscribers with associated calling numbers, said database hosting information associated with said calling numbers for different objects to which said subscribers belong;

said first object is one of a mobile telephone network, a wire-based telecommunication network, a cable television network, an Ethernet, or an electrical distribution network; and

wherein when an exactly overlapping language is not available, said protocol coordination mechanism identifies protocols that are within a vocabulary of said first object and said second object by analyzing which types of communication are allowed in the first object and the second object and how traffic of the communication session is to be routed

through the first object and the second object, and selects a protocol that minimizes a translation burden to a router based on a result of the analyzing.

Claim 2 (Previously Presented): The device according to Claim 1, wherein the router is included in said central controller, the router configured to receive information from said first adapter and to coordinate said communication session between said first object and said second object.

Claim 3 (Previously Presented): The device according to Claim 1, wherein the router is included in said central controller, the router configured to provide an interface between said first adapter and said second adapter, wherein

said central controller is configured to access information in said database regarding services to be invoked when establishing said communication session between said first object and said second object and sending from said router control signals to at least one of the first adapter and the second adapter so as to establish a protocol to be employed by said first adapter and said second adapter when communicating during said communication session.

Claim 4 (Previously Presented): The device according to Claim 1, wherein:
entries in said list of subscribers in said database are changed when said central controller is notified of a subscriber moving from one object affiliation to another; and
new information associated with a movement of a subscriber, is used to establish said communication session at a present object associated with said subscriber such that a change in calling numbers by said first object is not required in order to establish said communication session with said subscriber.

Claim 5 (Previously Presented): The device according to Claim 1, wherein said database includes entries that associate various calling numbers for a particular subscriber with an object and a net number for said particular subscriber.

Claim 6 (Previously Presented): The device according to Claim 5, wherein said database is configured to associate one calling number included in a call request for a specific subscriber with a net number and another calling number at which said specific subscriber is available.

Claim 7 (Currently Amended): A communication system, comprising:

- a first adapter configured to translate between a first native protocol used in a first object and a general protocol;
- a central controller configured to communicate with said first adapter using said general protocol; and
- a second adapter configured to establish a coordination session between said central controller and a second object, said second object employing a second native protocol that is not compatible with said first native protocol, wherein:
 - said central controller is configured to establish a communication link between said first object and said second object;
 - said central controller includes a protocol coordination mechanism that compares attributes of different protocols supported by said first adapter and said second adapter;
 - said central controller includes a database having a list of subscribers with associated calling numbers, said database hosting information associated with said calling numbers that includes different objects to which said subscribers belong;

said first object is one of a mobile telephone network, a wire-based telecommunication network, a cable television network, an Ethernet, or an electrical distribution network; and

wherein when an exactly overlapping language is not available, said protocol coordination mechanism identifies protocols that are within a vocabulary of said first object and said second object by analyzing which types of communication are allowed in the first object and the second object and how traffic of a communication session is to be routed through the first object and the second object, and selects a protocol that minimizes a translation burden to a router based on a result of the analyzing.

Claim 8 (Previously Presented): The system according to Claim 7, wherein the router is included in said central controller, the router configured to receive information from said first adapter and to coordinate said communication session between said first object and said second object.

Claim 9 (Previously Presented): The system according to Claim 7, wherein the router is included in said central controller, the router configured to provide an interface between said first adapter and said second adapter, wherein:

said central controller is configured to access information in said database regarding services to be invoked when establishing said communication session between said first object and said second object and sending from said router control signals to at least one of said first adapter and said second adapter so as to establish a protocol to be employed by said first adapter and said second adapter when communicating during said communication session.

Claim 10 (Previously Presented): The system according to Claim 7, wherein:
entries in said list of subscribers are changed when said central controller is notified of a subscriber moving from one object affiliation to another; and
new information associated with a movement of said subscriber is used to establish said communication session at a present object associated with said subscriber such that a change in calling numbers by said first object is not required in order to establish said communication session with said subscriber.

Claim 11 (Previously Presented): The system according to Claim 7, wherein said database includes entries that associate various calling numbers for a particular subscriber with an object and a net number for said particular subscriber.

Claim 12 (Previously Presented): The system according to Claim 7, wherein said database is configured to associate one calling number included in a call request for a specific subscriber with a net number and another calling number at which said specific subscriber is available.

Claim 13 (Currently Amended): A method for communicating between objects employing incompatible communication protocols, comprising:

sending coordination information from a first adapter associated with a first object to a central controller;

translating at said first adapter information formatted in a first native protocol used in a first object to a general protocol;

receiving said coordination information at a central controller;

identifying and comparing at said central controller communication attributes of said first adapter and said first object and attributes associated with a second object having associated therewith a second adapter and a second native protocol that is not compatible with said first native protocol;

coordinating between said central controller, said first adapter, and said second adapter including:

translating information sent from said first object in said native protocol; and
receiving said information at said second object in said second native protocol;

wherein, when an exact overlapping language is not available, said identifying and comparing comprises identifying protocols that are within a vocabulary of said first object and said second object by analyzing which types of communication are allowed in the first object and the second object and how traffic of a communication session is to be routed through the first object and the second object, and selecting a protocol that minimizes a translation burden to a router based on a result of the analyzing.

Claim 14 (Previously Presented): The method according to Claim 13, wherein:

said sending and said receiving include sending said coordination information and receiving said coordination information when said coordinating information is formatted in a predetermined protocol that is different from said first native protocol; and

said coordinating includes establishing at said central controller whether said first adapter and said second adapter perform said step of translating information exclusively and determining whether an intermediate translating step is required.

Claim 15 (Previously Presented): The method according to Claim 13 wherein said coordinating includes directing said first adapter and said second adapter to translate said information into a predetermined protocol that is different from said first native protocol and said second native protocol.

Claim 16 (Previously Presented): The method according to Claim 15, wherein said translating includes translating said information exclusively in said first adapter and said second adapter, and not in said central controller.

Claim 17 (Previously Presented): The method according to Claim 13, further comprising:

determining whether an activity in said first object requires communication outside of said first object and initiating said sending step when said activity takes place outside of said first object.

Claim 18 (Previously Presented): The method according to Claim 17, wherein:
said coordinating includes contacting said second object and translating said information into a format supported by said second adapter for translating said format into said second native protocol.

Claim 19 (Previously Presented): The method according to Claim 13, further comprising:

establishing a profile for a connection for a communication session between said first object and said second object so as to streamline future coordination for future communication sessions.

Claim 20 (Original): The method according to Claim 19, wherein:

said first object establishes a second object in which services for the communication session will be used.

Claim 21 (Previously Presented): The method according to Claim 13, wherein:

said coordinating is performed in a protocol coordination mechanism that handles and registers rules and conditions for communicating between said first object and said second object.

Claim 22 (Previously Presented): The method according to Claim 21, further comprising:

establishing at said protocol coordination mechanism a service to be used according to a user profile stored in a database associated with a connection to be made.

Claim 23 (Previously Presented): The method according to Claim 22, wherein said coordinating includes identifying specific rules for each of said first object and said second object.

Claim 24 (Previously Presented): The method according to Claim 15, wherein:

said coordinating includes indicating conditions for linking said first object and said second object by considering available factors including at least one of required channel distributions, requisite protocol translation operations, and cost in income distribution between said first object and said second object.

Claim 25 (Previously Presented): The method according to Claim 24, wherein said coordinating includes registering agreements and conditions that are mutually agreed upon by said first object and said second object.

Claim 26 (Previously Presented): The method according to Claim 13, wherein:
said receiving includes receiving said coordination information at said central controller; and

said central controller is accessible to each object for other objects in addition to said first object and said second object.

Claim 27 (Currently Amended): A system for communicating between objects employing incompatible communication protocols, comprising:

means for preparing coordination information at a first adapter associated with a first object, including means for translating information formatted in a first native protocol used in said first object to a general protocol;

central controller means for receiving said coordination information and identifying and comparing communication attributes of said first adapter and said first object and attributes associated with a second object having associated therewith a second adapter and a second native protocol that is not compatible with said first native protocol; and

means for coordinating translation of information sent from said first object in said first native protocol, and receiving said information at said second object in said second native protocol; wherein

when an exactly overlapping language is not available, said central controller means identifies protocols that are within a vocabulary of said first object and said second object by analyzing which types of communication are allowed in the first object and the second object

and how traffic of a communication session is to be routed through the first object and the second object, and selects a protocol that minimizes a translation burden to a routing means based on a result of the analyzing.

Claim 28 (Previously Presented): The device according to Claim 1, wherein said protocol coordination mechanism determines how a particular communication link should be established between said first object and said second object.

Claim 29 (Previously Presented). The device according to Claim 1, wherein said protocol coordination mechanism analyzes candidate protocols and determines a most effective protocol for establishing said communication session.

Claim 30 (Cancelled).

Claim 31 (Previously Presented): The system according to Claim 7, wherein said protocol coordination mechanism determines how a particular communication link should be established between said first object and said second object.

Claim 32 (Previously Presented). The system according to Claim 7, wherein said protocol coordination mechanism analyzes candidate protocols and determines a most effective protocol for establishing said communication session.

Claim 33 (Cancelled).

Claim 34 (Previously Presented): The method according to Claim 13, wherein said identifying and comparing comprises determining how a particular communication link should be established between said first object and said second object.

Claim 35 (Previously Presented): The method according to Claim 13, wherein said identifying and comparing comprises analyzing candidate protocols and determining a most effective protocol for establishing a communication session.

Claim 36 (Cancelled).

Claim 37 (New): The device according to Claim 1, wherein the types of communication include an asynchronous communication, synchronous communication, and predetermined gradations of data rate.

Claim 38 (New): The system according to Claim 7, wherein the types of communication include an asynchronous communication, synchronous communication, and predetermined gradations of data rate.

Claim 39 (New): The method according to Claim 13, wherein the types of communication include an asynchronous communication, synchronous communication, and predetermined gradations of data rate.

Claim 40 (New): The system according to Claim 27, wherein the types of communication include an asynchronous communication, synchronous communication, and predetermined gradations of data rate.